

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 8390 WO F KE-FRI	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)						
International application No. PCT/EP2003/007090	International filing date (day/month/year) 03 July 2003 (03.07.2003)		Priority date (day/month/year) 09 July 2002 (09.07.2002)				
International Patent Classification (IPC) or national classification and IPC F16H 61/02, 61/12, F16H 59/68, 59/72							
Applicant ZF FRIEDRICHSHAFEN AG							
 This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 							
2. This REPORT consists of a total of	4 sheets, includi	ng this cover sl	neet.				
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).							
These annexes consist of a total of 3 sheets.							
3. This report contains indications rela	3. This report contains indications relating to the following items:						
I Basis of the report	I Basis of the report						
II Priority							
III Non-establishment	of opinion with regard to novel	ty, inventive ste	ep and industrial applicability				
IV Lack of unity of inv	vention						
	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;						
VI Certain documents	Costain decompants sited						
VII Certain defects in the international application							
VIII Certain observations on the international application							
Date of submission of the demand	Date	of completion of	of this report				
20 January 2004 (20.0	1.2004)	05 October 2004 (05.10.2004)					
Name and mailing address of the IPEA/EP	Autho	Authorized officer					
Facsimile No.	Telep	hone No.					

Translation

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/007090

1. Dasis of the report									
1.	With	regard to	the elements of the in	ternational application:					
		the inte	rnational application a	s originally filed					
	$\overline{\boxtimes}$	the des	cription:						
		pages	•	1	-3, 5-7	, as originally filed			
		pages				, filed with the demand			
		pages		4, 4a	, filed with the letter of	06 August 2004 (06.08.2004)			
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	\triangle	the clai	ms:						
		pages				, as originally filed			
		pages				r with any statement under Article 19			
		pages				, filed with the demand			
		pages		1	, filed with the letter of	06 August 2004 (06.08.2004)			
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		pages		· · · · · · · · · · · · · · · · · · ·	1/1	, as originally filed			
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	ш,		ence listing part of the	_					
		pages				, as originally filed			
		pages				, filed with the demand			
		pages			, filed with the letter of _				
2. With regard to the language, all the elements marked above were available or furnished to this Authority in the the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language									
		the lan	guage of a translation	furnished for the purpos	es of international search (under R	ule 23.1(b)).			
		the lan	guage of publication of	f the international applic	cation (under Rule 48.3(b)).				
		the lar	c language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/55.3).						
3.	With preli	regard ninary e	to any nucleotide a examination was carrie	and/or amino acid se d out on the basis of the	quence disclosed in the internated sequence listing:	ational application, the international			
		contai	ned in the international	application in written for	orm.				
		filed to	gether with the intern	ational application in co	mputer readable form.				
		furnisl	ned subsequently to thi	s Authority in written fo	rm.				
		furnisl	ned subsequently to thi	s Authority in computer	readable form.				
				osequently furnished willed has been furnished.	ritten sequence listing does no	t go beyond the disclosure in the			
			tatement that the info	rmation recorded in co	mputer readable form is identica	l to the written sequence listing has			
4.		The ar	nendments have result	ed in the cancellation of	:				
			the description, pages		_				
			the claims, Nos.						
			the drawings, sheets/i	ig	_				
5.		This re	port has been establish the disclosure as filed	ned as if (some of) the a	amendments had not been made, splemental Box (Rule 70.2(c)).**	ince they have been considered to go			
*	in th	ncement is repor 10.17).	sheets which have bee t as "originally filea	n furnished to the recei " and are not annexed	ving Office in response to an invit d to this report since they do n	ation under Article 14 are referred to ot contain amendments (Rule 70.16			
**	** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.								
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 03/07090

YES

NO

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v.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1.	Statement					
	Novelty (N)	Claims	1	YES		
		Claims		NO		
	Inventive step (IS)	Claims	1	YES		
		Claims		NO		
		u.				

2. Citations and explanations

Industrial applicability (IA)

The preamble of claim 1 is generally known and concerns an automatic gearbox control system for selecting and setting a speed.

Claims

Claims

The subject matter of the claim differs therefrom by virtue of its characterizing part, and hence is novel (PCT Article 33(2)).

DE19741182 A shows a variation in the shift curves as the clutch filling time varies, in that an upshift delay time which eliminates the influence of faults is set.

US5593364 shows specific shift performance data for high temperatures.

Furthermore, EP310275 shows a damaged control system which skips a defective speed.

All these measures come into play only when a fault exists and is detected.

Therefore the problem addressed by the present invention can be considered that of avoiding possible faults, as a preventive measure, thereby sparing the gearbox.

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The prior art does not disclose the solution to this problem proposed in claim 1 of the present application, whereby the speed set is evaluated, selected and set on the basis of the actuation frequency of an actuator or the service life rating of a speed. This solution therefore involves an inventive step (PCT Article 33(3)).